

### **R E M A R K S**

Reconsideration of this application, as amended, is respectfully requested.

### **THE SPECIFICATION**

The specification has been amended to correct an obvious error. Namely, the specification has been amended to correctly disclose that the slidable guide grooves 36 are formed in those surfaces of the movement guides 35 that face the sensor window 21b, in accordance with the disclosure in Fig. 3. No new matter has been added, and it is respectfully requested that the amendment to the specification be approved and entered.

### **THE DRAWINGS**

It is respectfully submitted that the drawings filed with the application papers on March 15, 2004, are formal drawings, and it is respectfully requested that the Examiner indicate the drawings as being accepted in the next Office Action.

### **THE CLAIMS**

Claim 1 has been amended to recite that the information terminal apparatus of the present invention is portable and includes a pressure sensitive sensor. In addition, claim 1 has been amended to recite that the protection unit comprises a film

adapted to cover the detection surface and a frame holding the film, and that the protection unit is movable between a first position covering the detection surface of the pressure sensitive sensor and a second position exposing the detection surface of the pressure sensitive sensor. Still further, claim 1 has been amended to clarify that the moving mechanism biases the protection unit to the first position to cover the detection surface of the pressure sensitive sensor. See the disclosure in the specification at, for example, page 20, line 18 through page 21, line 26.

New claims 13-18 depending from claim 1 have been added to recite additional features of the present invention, as supported by the canceled claim 10 and the disclosure in the specification at, for example, page 21, line 15, to page 22, line 25.

Claim 9 has been amended to be rewritten in independent form to include subject matter along the lines of amended independent claim 1, and new claims 19-24 have been added to recite the subject matter of new claims 13-18 depending from amended independent claim 9.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 1, 8 and 12 were rejected under 35 USC 102 as being anticipated by USP 6,668,071 ("Minkin et al"), and claims 2-7 and 9-11 were rejected under 35 USC 103 as being obvious in view of various combinations of Minkin et al, USP 6,065,076 ("Sorenson"), US 2003/0109214 ("Yamashiro"), US 2003/0044090 ("Miyashita et al"), US 2002/0094201 ("Lu") and USP 6,033,130 ("Muroi et al"). These rejections, however, are respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in amended independent claim 1, a portable information terminal apparatus (i.e., a PDA) is provided which comprises a pressure sensitive sensor having a detection surface adapted to be exposed to an outside of the apparatus. As recited in amended independent claim 1, the pressure sensitive sensor reads a fingerprint placed on the detection surface and generates fingerprint data, and a control unit collates the fingerprint data generated by the pressure sensitive sensor and permits operation of the portable information terminal apparatus.

Such pressure sensitive fingerprint sensors sense fine recesses and bumps of a fingerprint and, therefore, the detection surface of the sensor must be sensitive. Also, because the pressure sensitive sensor is provided on a portable information terminal apparatus, the sensor is often subject to external

forces applied to the portable information terminal apparatus. As a result, the detection surface of the sensor may easily be damaged by the external forces.

Accordingly, in order to protect the detection surface of the pressure sensitive sensor, the portable information terminal apparatus of the present invention as recited in amended independent claim 1 is provided with a protection unit to protect the detection surface of the pressure sensitive sensor. As recited in amended independent claim 1, the protection unit comprises a film adapted to cover the detection surface and a frame holding the film, and the protection unit is movable between a first position covering the detection surface of the pressure sensitive sensor and a second position exposing the detection surface of the pressure sensitive sensor. In addition, as recited in amended independent claim 1, the moving mechanism biases the protection unit to the first position to cover the detection surface of the pressure sensitive sensor.

Similarly, according to the present invention as recited in amended independent claim 9, the protection unit includes a cover that is pivotally attached by a hinge to a sensor window from which the detection surface of the pressure sensitive sensor is adapted to be exposed, and the protection unit is movable between a first position covering the detection surface of the pressure sensitive sensor and a second position exposing the detection

surface of the pressure sensitive sensor. In addition, as recited in amended independent claim 9, an opening/closing button is provided to switch the protection unit between the first position and the second position.

With the structure of the claimed present invention, the (delicate) pressure sensitive sensor may be provided on the portable information terminal apparatus in a secure manner so that the detection surface of the sensor can be protected from the external forces by the protection unit.

As the protection unit, a film of adequate flexibility is employed. Thus, when the user's fingerprint is read, the film is removed from the detection surface of the sensor. When inputting by handwriting is executed with a stylus, the film is set on the detection surface of the sensor. Inputting by handwriting on the film can be thereby executed. These features are recited in the dependent claims.

With respect to the cited references, Minkin et al discloses an apparatus in which pulse light is applied from an upper side to the user's fingertip. The light transmitted through the finger is received by a photosensitive unit provided under the finger to detect a venous pattern of the finger. Minkin et al also discloses a cover to protect a detection surface of the photosensitive unit, and that the cover is removed from the detection surface at the time of authenticating and that the

cover is arranged on the detection surface when the apparatus is not used.

It is respectfully submitted, however, that Minkin et al does not disclose a portable information terminal apparatus or a pressure sensitive sensor. Accordingly, since the sensor of Minkin et al is not a pressure sensitive type, inputting by handwriting using a stylus cannot be executed, and since the sensor cover of Minkin et al is a rigid plate it cannot enable handwriting input using a stylus, for example.

By contrast, according to the claimed present invention, a portable information terminal apparatus is provided which comprises a pressure sensitive type sensor, and the protection unit comprises a film adapted to cover the detection surface of the sensor. While the apparatus is ordinarily carried, the detection surface is protected by the film on the detection surface of the pressure sensitive sensor, but when a fingerprint is to be detected, the film is removed from the detection surface such that a finger can be placed on the detection surface. Moreover, with the structure of the claimed present invention, when inputting information by handwriting is executed with a stylus, the film is placed on the detection surface and the information can be input through the film using the stylus. The protection unit of the claimed present invention thus has two effects, protection of the detection surface and supporting of

inputting information by handwriting with a stylus. These effects can be achieved with a film as according to the claimed present invention, but cannot be achieved by the structure disclosed in Minkin et al.

Soreson discloses an information terminal apparatus capable of inputting information by handwriting using a stylus. It is respectfully submitted, however, that Soreson does not disclose a pressure sensitive sensor having a function of collating a fingerprint. In addition, it is respectfully pointed out that the cover in Sorenson does not include a film as according to the claimed present invention, but instead is formed by connecting a plurality of plate-like members.

Miyashita et al discloses an information terminal apparatus comprising a fingerprint sensor. It is respectfully submitted, however, that Miyashita et al also does not disclose a protection unit comprising a film as according to the claimed present invention.

Yamashiro discloses a bellows-shaped sunscreen for a windshield of a vehicle. It is respectfully submitted, however, that the bellows-shaped sunscreen does not have a function of protecting/covering anything, but instead merely blocks sunlight. For this reason, it is respectfully submitted that the disclosure in this reference is not applicable to the field of the claimed present invention.

It is respectfully submitted, moreover, that Lu and Muroi et al also do not disclose, teach or suggest a pressure sensitive sensor and protection unit comprising a film as according to the claimed present invention.

In view of the foregoing, it is respectfully submitted that the present invention as recited in amended independent claims 1 and 9, and each of claims 13-18 and 19-24 respectively depending therefrom, patentably distinguishes over all of the cited references, taken singly or in any combination, under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

/Douglas Holtz/

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